

Flipped Class: A New Pedagogical Approach for Higher Education in India**Dr. Surjoday Bhattacharya¹**<https://doi.org/10.5281/zenodo.17487600>**Review: 01/10/2025,****Acceptance: 12/10/2025****Published: 30/10/2025**

Abstract: India being the third largest higher education system in the world, produces graduates merely 7% of its population where only 46.2% are employable. India's underperformance in higher education is due to lack of equity, poor infrastructure, political interference, quality and quantity of faculty, research and innovation, accreditation and quality of teaching-learning components. Issues in teaching learning were not tackled in a proper way. Till date almost whole higher education system in India is practicing lecture method as a major pedagogical tool. After introducing and implementing NEP 2020, teachers in HEIs has no other choice but to opt for a different pedagogical practice. Flipped class has been proposed to answer the problems of traditional classroom and moving towards student centered classroom in higher education. In flipped learning, students are at the core of 'knowledge construction. it is active, engaging and customizable. it also suffers from some potential hurdles while implementing it in regular teaching learning process. Initially students' non-readiness towards the approach creates a difficult situation to implement flipped classroom. Some of very common digital apps can help the teachers to create a flipped class provided if they are ready to do so.

Keywords: NEP, Flipped Class, Flipped Learning, Higher Teaching pedagogy, Bloom's Taxonomy

Introduction: India's higher education system ranks third behind China and the US. Over the past decade, India's higher education industry has seen more universities. Greater than 60% of higher education institutions (HEIs) are managed or promoted by the private sector, making them the world's largest with the second-highest enrolment (Shaguri, 2013) [55 thousand HEIs in 2020]. However, only 7% of India's population is a graduate (Masani, 2008), and its output is unemployed outside elite universities. Skill India says 46.2% of Indian graduates are employable (2022). This is bad, but the Indian government and higher and technical education regulators are fixing it. India's higher education performance is low due to weak equity, infrastructure, political involvement, faculty quality and quantity, research and innovation, accreditation, and teaching-learning components. Authorities addressed most issues, but not education. Teaching pedagogy has been neglected despite curriculum changes, faculty recruiting requirements changes, and higher education restructuring. The student-teacher ratio and government failure to regulate private HEI selection methods (particularly in sub-urban and rural areas and political-affiliated institutions) may explain this. Lectures are used in most Indian higher education institutions. Semi-active teachers and passive students produce unskilled graduates who cannot adjust to market and societal changes. Lack of relationship between weak curriculum and market need may explain this pedagogical activity. (2015) (Sharma et al.). India might emulate Chinese universities by granting teachers classroom pedagogy autonomy (Suryavanshi, 2020). Every teacher can choose a teaching method, but their job satisfaction, students' futures, and other circumstances determine classroom practices. The National Assessment and Accreditation Council (NAAC) has long promoted exceptional teaching learning experiences that engage students in higher-order thinking using participatory, experiential, and ICT resources for self-learning and collaborative learning in HEI. Since NEP 2020, ground-level higher education has altered drastically. NEP 2020 prioritises student-centred learning over teacher-centered practices in higher education (Kumar, 2020; Mandal, 2018). Teachers must change their pedagogy according to government and higher education governing body NEP implementation instructions. This changes Indian higher education classroom processes.

Paradigm shift: need of the Time: A shift from schooling to learning was seen in worldwide education last decade (Field, 2006; Jarvis, 2007, 2008). Students learn through diverse activities, but education is structured. Learners gain knowledge, skills, and abilities. Thus, 'learning' is 'learner-oriented' and personalized to fulfill learners' needs and wants. In contrast, education is exclusively taught externally. Lectures are considered 'teaching' in Indian universities. According to this authoritative teaching technique, knowledge transfer is easy and pupils must learn or be "poor learners." This is the "blame the student" style (Biggs, 1999), and lecturing is a convenient way to address many students at once in huge classes like those in India, but it has no other benefit and has been demonstrated to be an inferior teaching method. The idea that "if one thing is good for one child, it is good for all" is a major concern in Indian higher education (Singh, 2018). This excludes learner psychology and individuality. Everyone benefits from

¹ **Dr. Surjoday Bhattacharya**, Associate Professor in Education, Dr. Ram Manohar Lohiya Government Degree College, Muftiganj, Jaunpur, Email: surjoday@gmail.com, Mob: 09598582126 Orchid: 0000-0002-2286-1501 Vidwan ID: 172201.

"lecturing," the Indian higher education system's pedagogical method. Dismissing active learning. This explains why Indian higher education lags globally. The system, especially classroom approaches, needs to be rethought as other components have been addressed periodically. Uniform access to quality higher education is another 2030 UNDP sustainable target, and India has a deadline. To improve higher education, NEP 2020 modified classroom approach. All NEP 2020 higher education proposals are being implemented in India. The NEP 2020 stresses HEI-industry partnership. Active learning is encouraged in GOI's new skill-oriented higher education curriculum. Many possibilities in the curriculum allow students to engage in self-learning. Since 2021-22, higher education has used a multi-disciplinary approach to introduce pupils to unfamiliar fields (Sheikh, 2017). While state governments like U.P. build e-learning parks at each block (preferably in government institutions) to connect students to the internet, High-quality e-contents in a digital library accessible via mobile apps encourage a new pedagogy. Flipped learning was developed to engage students and optimize internet content for face-to-face learning. To improve higher education classrooms and make them student-centered, flipped classes are advocated (Nouri, 2016).

Review of Works:

Learner-centric pedagogy is successful if and only if it improves student performance, engagement, learning outcomes, and motivation. Flipped pedagogy (FC) has been tested for its efficacy on three major challenges. FC improved learning performance over face-to-face (Talan, 2019; Gillispie, 2016; Zengin, 2017). Studies in diverse fields validated the result (Boyras, 2016; Thai, et al., 2017), whereas others found no link between FC and academic ability (Smallhorn, 2017). FC requires students to come to class prepared (Talan, 2018) and improves student-teacher engagement with rapid feedback (Milman, 2012). It boosts academic engagement (Talan et al., 2019; Tucker, 2012; Clarck, 2015) and lesson participation. FC made students happier (Morgan et al., 2015; Street, 2015). FC boosts student motivation (Wiginton, 2013; Smallhorn, 2017), improving learning outcomes (Kong, 2014; Gillispie, 2016). Another difficulty in teaching is learning retention. Flipped class retention is higher because it engages more sensory organs. Flipped classes encourage active learning (Baker, 2000; Shimamoto, 2012) and turn students into active learners (King, 1993).

Understanding flipped classrooms:

Flipped classroom is a "pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter."

(The Flipped Learning Network, 2014).: This approach uses revised and inverted Bloom's taxonomy, where lower-order learning occurs outside of class before class begins, freeing up space for higher-order learning activities and interactions.

Figure 1: Imposing Bloom's Taxonomy Flipping (<https://omerad.msu.edu/>).



Flipped Learning' describes flipped classrooms (Pappas, 2016). However, some leaders in the area specify that "Flipping a class can, but does not necessarily, lead to Flipped Learning." (FLN, 2014). Flipped learning relies on flexible environment, learning culture, intentional material, and professional educators.

Flexible Environment: Teachers must adapt their teaching style to accommodate group or individual work in traditional classrooms. The content flow must be changed to do this. Flipped classrooms allow several learning options without compromising class time or space. Students can pick when, where, and how to learn, and professors can construct a flexible manner to boost class efficacy based on students' pace and create a proper assessment technique.

Learning Culture: The flexibility drives the classroom to be learner-centred, so basic lower-order learning can happen outside the class and higher-order in-depth learning can happen in class. This engages students in knowledge production and benefits them from 'personally meaningful' feedback.

Flipped learning emphasises conceptual and procedural fluidity. Flipping the class requires the teacher to choose content. They must decide which content to deliver before class to develop basic knowledge and which to present in class to maximise brain storming, active participation, and in-class time while keeping age and grade in mind.

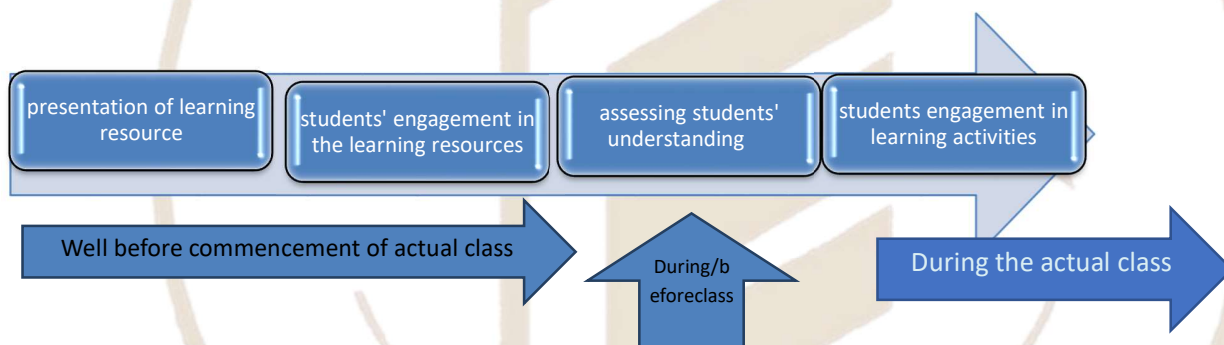
Professional educator: The preceding three pillars depend on professional educators' "back of the stage" efficiency. Flipping a class effectively is difficult. A good instructor should monitor students throughout class to provide timely feedback. Professional educators reflect, collaborate to improve learning, embrace constructive criticism, and tolerate controlled classroom chaos (FLN, 2014). Professional educators should be prominent but hardly dominant. He should always support flipped learning.

Typical flipped learning sequence:

- (a) Present a digital material to students before class to have a common understanding of the topic;
- (b) Students watch/go through the digital content;
- (c) instructor assesses students' understanding at the beginning of class or via quiz;
- (d) Students engage in class learning activities.

When designing a flipped approach, the instructor requires time to find or prepare information and create a list of directions for students to follow while using digital content/learning tools. Instructors must be careful while choosing or preparing learning material. Insights into worries can be gained via flipped classroom planning in practice. Suppose the instructor wants to distribute a video instruction.

Figure 2: Flipped Learning Process.



- (a) The video might be prepared by the individual or found elsewhere. Student introductions should include whether it developed or where. Is this available until course end? How long? Is it part of a long course or standalone? Do students merely watch the video or should they recognise significant features? What if they have a question? Will there be a forum or classroom discussion for their question?
- (b) The session length should not cause student fatigue. A 5- to 7-minute video tutorial is ideal (Knott, n.d.). Students must receive tutorials a day before class.
- (c) The instructor might organize assessments before or during class through several methods. MCQ quizzes can be given before or during class using LMS or free quiz software like Kahoot. The quiz may be diagnostic (no score) or have a tiny percentage to stimulate students. Before class assessment, a discussion forum may be helpful for instructors to summarise tutorials or answer topic-related questions.
- (d) In-class activities can be planned based on the outcome of 'step c'. Instructors must have peer-discussion, collaborative learning, and student-instructor engagement tactics.

Advantages of flipping:

In flipped learning, students are at the core of 'knowledge construction' which is totally in contrast with traditional method. Being at the core, it makes students feel responsible for their own learning it also fosters independent learning. This way 'learning' is the goal of flipped learning, rather than teaching. Traditional method of teaching follows 'average' approach in learning outcome, while flipped learning follows 'self-pace' approach of learning. It motivates students to take control of their own learning (Dunn, 2014). Flipped learning is active, engaging and customizable. It gets the traditional class all upright down with the help of technology (Demirel,

2016). However, "It may be argued that as far as the cognitive ability is concerned, students are not confronted with spontaneous questions during the interaction with the video. But it is interesting to notice that engaging with the video will lead to the maximum retention of information and will inspire high level thinking skills" (Nicolosi, 2012).

Implementation hurdles in Indian classrooms: some concerns

Flipped classrooms, like other pedagogical approaches, may face challenges when implemented in normal teaching and learning. Pre-implementation and in-implementation obstacles exist.

- (a) Pre-implementation challenges: Invest sufficient time in searching and creating digital content for the first time. However, digital content can be reused. Flipped classrooms cover less subject than traditional methods, but they learn it better. Increased screen usage may cause health problems. It can exacerbate India's digital divide.
- (b) Implementation Challenges: Class size is a significant obstacle to flipping classrooms in our society. Teachers must create a method for flipped class with huge classes that requires operational reasoning and planning. This takes up much time before class. Though several clickers/free apps are available to address the issue, technological understanding among HEI faculty and student availability remains a major hurdle.

Flipped classrooms are challenging to establish due to students' unpreparedness. The teacher must determine whether to reteach the topic for outside learning or build deeper knowledge. Passive listening is easier than active participation in class for kids like those above.

Conclusion:

The Indian higher education system is being revamped with NEP 2020. According to NEP 2020, course format, institutional structure, student enrolment, and appointment issues are addressed. NEP also suggests changing classroom methodology, but the teacher should use a combination of approaches that best suit the classroom setting to produce an interactive, engaging classroom. Flipped classes can do so, so teachers can use ordinary digital tools to create flipped classes in HEI classrooms, especially those in distant places without current infrastructural resources. Creating a WhatsApp group for students would assist virtualize class. YouTube video lectures before class can aid professors and students. Kahoot and other free quiz apps can assist assess students when needed. Google Classroom, Moodle, Tec mint, and Edmodo are free LMS that allow virtual classes with live sessions, content upload, evaluation, and student enrolment. Most importantly, these apps are free and widely available in mobile app stores. Students can use their phones there. HEI faculty can flip their class simply if they're ready.

References:

- Agrawal, P. (2006). *Higher Education In India: The Need for Change, Working Paper, No. 180*. New Delhi: Indian Council for REsearch on International economic relations (ICRIER).
- Baker, J. (2000). **The 'classroom flip': Using web course management tools to become the guide by the side. 11th international conference on College Teaching and Learning. Jacksonville, FL.**
- Biggs, J. (1999). *Teaching for Quality Learning at University*. Buckingham: SHRE and Open University Press.
- Boevé, A. J., Meijer, R. R., Bosker, R. J., Vugteveen, J., Hoekstra, R., & Albers, C. J. (2016). Implementing the flipped classroom: An exploration of study behaviour and student performance. *Higher Education*.
- Clark, K. (2015). The effects of the flipped model of instruction on student engagement and performance in the secondary mathematics classroom. *Journal of Educators Online*, 12(1), 91-115.
- *Definition of Flipped Learning*. (2014, March 12). Retrieved from Flipped Learning Network: <https://flippedlearning.org/definition-of-flipped-learning/>
- Demirel, E. E. (2016, September). Basics and Key Principles of Flipped Learning: Classes Upside Down. *International Journal of Languages, Literature and Linguistics*, 2(3), 109-112.
- Field, J. (2006). *Lifelong Learning and the New Educational Order*. Sterling: Trentham Books.
- Gillispie, V. (2016). *Using the flipped classroom to bridge the gap to generation Y*. Retrieved from National Library of Medicine: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4795497/>
- Jarvis, P. (2007). *Globalization, Lifelong Learning and the Learning Society*. New York: Routledge.
- Jarvis, P. (2008). *Democracy, Lifelong Learning and Learning Society*. New York: Routledge.
- King, A. (1993). From sage on the stage to guide on the side. *College Teaching*, 41(1), 30-35.
- Knott, R. (n.d.). *Video Length: How long should instructional video be? (New Data)*. Retrieved from TechSmith: <https://www.techsmith.com/blog/video-length/>
- Kong, S. (2014). Developing information literacy and critical thinking skills through domain knowledge learning in digital classrooms: An experience of practicing flipped classroom strategy. *Computers & Education*, 78, 160-173.

- Kumar, D. (2020). A Critical Analysis and A Glimpse of New Education Policy 2020. *International Journal of Scientific and Engineering Research*, 11(10), 248-253.
- Mandal, S. (2018). Teaching in Indian Higher Education: Six Principles for Improvement. *International Higher Education*, 28-29.
- Masani, Z. (2008, February 27). *India still Asia's Reluctant Tiger*. Retrieved from BBC News: <http://news.bbc.co.uk/2/hi/business/7267315.stm>
- Milman, N. (2012). The flipped classroom strategy: What is it and how can it best be used. *Distance Learning*, 9, 85-87. Retrieved from [https://books.google.co.in/books?hl=en&lr=&id=NgYoDwAAQBAJ&oi=fnd&pg=PA9&dq=Milman,+N.+\(2012\)&ots=M6Fm9ycpIb&sig=E9Wdt_BOKLLGP6XTu6q3KHIMeR8#v=onepage&q=Milman%2C%20N.%20\(2012\)&f=false](https://books.google.co.in/books?hl=en&lr=&id=NgYoDwAAQBAJ&oi=fnd&pg=PA9&dq=Milman,+N.+(2012)&ots=M6Fm9ycpIb&sig=E9Wdt_BOKLLGP6XTu6q3KHIMeR8#v=onepage&q=Milman%2C%20N.%20(2012)&f=false)
- Morgan, H., McLean, K., Chapman, C., Fitzgerald, J., Yousuf, A., & Hammoud, M. (2015). The flipped classroom for medical students. *The Clinical Teacher*, 12(3), 155-160.
- Nicolosi, A. (2012). Grammar Lessons with Flipped Classroom Method. *Proc. the 3rd Black sea ELT conference Technology: A Bridge to Language Learning* (pp. 13-18). Yamen: School of Foreign Languages.
- Nouri, J. (2016). The flipped classroom: for active, effective and Increased Learning - especially for low achievers. *INTERNATIONAL JOURNAL OF EDUCATIONAL TECHNOLOGY IN HIGHER EDUCATION*, 13(33), 1-10.
- Pappas, C. (2016, February 25). *Blended Learning Vs Flipped Learning: Can You Tell the Difference*. Retrieved from eLearning Industry: <https://elearningindustry.com/blended-learning-vs-flipped-learning-can-tell-difference>
- Reddy, K., Xie, E., & Tang, Q. (2016, November 19). Higher education, high-impact research, and world university rankings: A case of India and comparison with China. *Pacific Science Review B: Humanities and Social Sciences*, 2, 1-21.
- Shaguri, O. R. (2013). *Higher Education in India Access, Equity, Quality*. Retrieved from DOCPLAYER: <https://docplayer.net/6311022-Higher-education-in-india-access-equity-quality-obadya-ray-shaguri.html>
- Sharma, S., & sharma, P. (2015). Indian Higher Education System: Challenges And Suggestions. *Electronic Journal of Inclusive Education*, 3(4), 1-4.
- Sheikh, Y. A. (2017). Higher Education in India: Challenges and Opportunities. *Journal of Education and Practice*, 8(1), 39-42.
- Shimamoto, D. N. (2012, April 17). *Implementing a Flipped Classroom: An Instructional Module*. Retrieved from Scholar space: <https://scholarspace.manoa.hawaii.edu/handle/10125/22527>
- Singh, W. (2018). Higher Education In India: Issues and Challenges. *Journal of Advances & Scholarly Research in Allied Education*, 15(5).
- Smallhorn, A. (2017). The flipped classroom: A learning model to increase student engagement not academic achievement. *Student Success*, 8(2), 43-53.
- Street, S., Gilliland, K., McNeil, C., & Royal, K. (2015). The flipped classroom improved medical student performance and satisfaction in a pre-clinical physiology course. *Medical Science Educator*, 25(1), 35-43.
- Suryavanshi, S. (2020). Reflections from a Comparative Study for Reimagining Indian Universities. *University News*, 58(33), pp. 96-102.
- Talan, T., & Gulsecen, S. (2019). The Effect of A Flipped Classroom on Students' Achievements, Academic Engagement and Satisfaction Level. *Turkish Online Journal of Distance education*, 20(4), 31-60.
- Thai, T., Wever, B. D., & Valcke, M. (2017). The impact of a flipped classroom design on learning performance in higher education: Looking for the best "blend" of lectures and guiding questions with feedback. *Computers & Education*, 113-126.
- *The flipped Classroom*. (n.d.). Retrieved from University of Waterloo: https://uwaterloo.ca/centre-for-teaching-excellence/sites/ca.centre-for-teaching-excellence/files/uploads/files/the_flipped_classroom_white_paper.pdf
- Tucker, B. (2012). The flipped Classroom. *Education Next*, 12(1).
- Wheebox. (2022). *India Skills Report 2022*. Hariyana: Wheebox.
- Wiginton, B. L. (2013). *Flipped instruction: An investigation into the effect of the learning environment on student self-efficacy, learning style, and academic achievement in an Algebra I classroom*. Retrieved from ProQuest: <https://www.proquest.com/openview/d18f1d65ce60aa761bf9b2adb86410b1/1?pq-origsite=gscholar&cbl=18750>
- Zengin, Y. (2017). Investigating the use of Khan Academy and Mathematics Software with a Flipped Classroom Approach in Mathematics Teaching. *Journal of Educational Technology & Society*, 20(2), 89-100